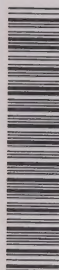
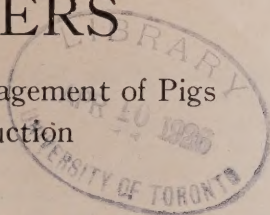


FALL LITTERS

The Breeding, Feeding and Management of Pigs
for Winter Pork Production

BY

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DOMINION ANIMAL HUSBANDMAN



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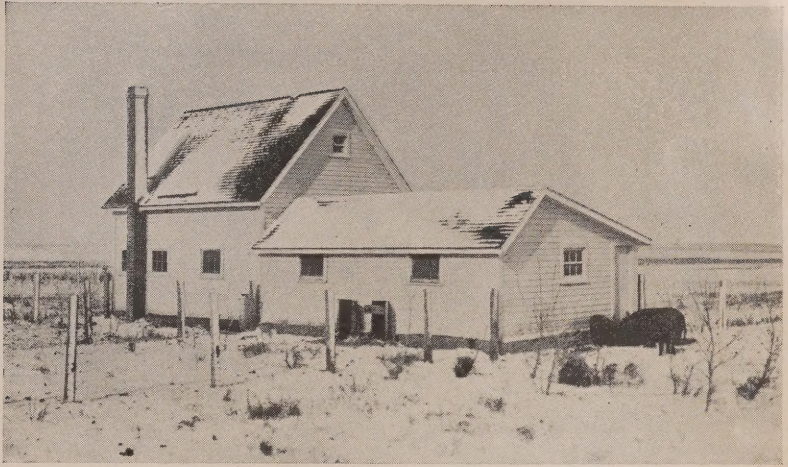


September pigs in winter quarters.

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A convenient little piggery—Economical of construction and well suited to winter feeding. (See plan on page 8)
The feeding pens may be extended as required.

FALL LITTERS

In constructive criticism of bacon production in Canada one item invariably is mentioned. This item, vital to the upbuilding of the trade is none other than irregularity of supply. Swine production in Canada is irregular or rather, periodic. On the other hand, the consumption and demand of the great bacon market, Great Britain, is regular. For Canadian bacon to maintain an already established position on that market, there are two primary essentials in Canadian production, quality and regularity of supply. Of late years much has been done toward the betterment of quality. The three breeds of acknowledged bacon type with their grades and crosses, are greatly predominant in Canada. The effect of discriminating market regulations is responsible for closer study of breeding and feeding as affecting the production of select hogs. With much still to be accomplished along these lines, the Canadian swine-grower realizes his problem and has a standard of perfection before him, so that to-day the study of ways for the establishment of regular supply is of paramount importance.

WINTER SWINE FEEDING REQUIRES SPECIAL STUDY

Raising pigs at all times of the year presents little difficulty in the case of other bacon-producing countries in more favoured latitudes. With at least a six-month period when winter feeding conditions apply in most parts of inhabited Canada, the tendency has been toward the rearing of one litter only each year. In a general way in farm practice, sows are bred to farrow from March to June inclusive, the resultant litters being marketed from September to January. A comparison of price levels for the latter period with that from March to May forms an excellent example of the operation of the law of supply and demand. Spring prices are high invariably.

In advocating the rearing of late summer and fall litters in a much more general way, let it be understood that nothing but disappointment will result to the farmer swine-grower who applies haphazard methods. *The ability to grow young pigs in winter, to fatten and protect them from loss, is the measure of a good pig-man.* Only the application of correct principles of breeding, feeding and housing will bring success.

HINTS FOR THE TWO-LITTERS-A-YEAR BREEDING PROGRAMME

1. Make September the limit month for fall farrowing. October pigs are mainly for the specialized expert.

2. Do not breed a sow again just after she has farrowed a good spring litter, and expect her to produce another just as good in the fall. Close spring breeding should be attempted only when the sow is in good condition and with a small spring litter. The fall pig needs the best start possible.

3. Allow six or seven weeks to the spring litter. If the litter is large and the sow pulled down in condition, *give her two weeks or so after weaning to get on the up-grade again before breeding her.* In many cases fall litters are small and weak, simply due to breeding the sow too soon, or when in too thin a condition.

4. Give the sow the best pasture possible and a light meal ration, sufficient to put her in good flesh at farrowing.

BREEDING FOR TWO LITTERS A YEAR

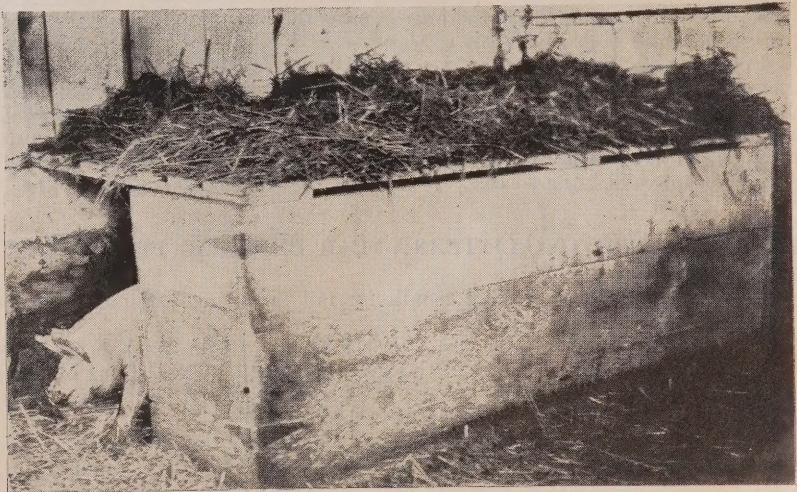
In the following table three dates are chosen as representing an early, intermediate and late breeding and farrowing date, from which the comparative relationship of spring and fall litters may be seen at a glance.

BREEDING CHART
On the Basis of Two Litters a Year

Under farm conditions	The Spring Litter.		The Fall Litter.	
	Sow bred.	Will farrow.	Sow bred again.	Will farrow.
Early breeding date.....	Nov. 14	Mar. 6	May 7	Sept. 1
Average breeding date.....	Dec. 6	April 1	May 26	Sept. 18
Late breeding date.....	Dec. 20	April 15	June 10	Oct. 3

HOUSING

Not many farms have piggeries. Where one or two sows only are kept, such a building is unnecessary. Do not put one cent more into pig shelters than is required. The March or April litter often can be given a warm box-stall. Certainly, the little pigs must have warm quarters, but at this time only. Exer-



A sleeping berth—Simple, far from beautiful, but, nevertheless, one of the most important housing accessories in the winter feeding of fall litters,

cise is essential. To the farmer who wishes to construct a cheap piggery, embodying all the required principles, the plan on page 8 is recommended. These requirements, as specially referring to the two-litter-a-year programme, are as follows:—

1. Low cost.
2. Convenience and sanitation.
3. A heated farrowing-pen and feed-room.
4. Cheap, well-ventilated (straw-loft) feeding-pens, permitting of egress to outdoors.
5. A sleeping-berth, low and straw-covered.
6. Cement floors (lined with wood in the sleeping-berths, only).

Winter pigs can be raised in any building subscribing to the above requirements. Housed thus: (1) *they will be dry at all times*, (2) have a *warm draughtless berth* in which to sleep (see illustration), (3) a well-protected pen in which to feed comfortably, (4) a yard in which *to exercise during the greater part of the winter*.

FEEDING THE FALL LITTER

Making a select from a September pig is a specialized job. Damp, draughty quarters predispose crippling. Combine these conditions with heavy feeding, both as to quality and quantity, and disaster results,—always. The text of the winter hog-feeder should be, “*Don't try to force*”. A fall pig cannot be finished in the same time as his spring-born brother. Forcing during his first four months will finish him, it is true,—but for the manure pile rather than the market.

RATIONS.—Feed all slop warm. Give plenty of trough room, and remember that even a short period of over-feeding will cause serious trouble. Supply a little good alfalfa or clover hay in a rack at all times. Give each lot a few roots daily, pulped or split. Sods are of the very greatest value; these with ashes and charcoal supply the mineral requirements.

FEEDING BEFORE WEANING.—Start the fall pig on a supplementary ration at five weeks of age, as follows: equal parts of middlings and finely ground oats, from which most of the hulls have been sifted. Feed them preferably dry in a small trough in a creep. Less scouring will result from dry feeding at this period. Give a little sweet skim-milk separately, daily.

FEEDING FROM WEANING UNTIL FOUR MONTHS OF AGE.—The sucking pig that is fed “on the side,” as just described, is in good shape for the weaning ration. Feed sparingly three or four times daily, the meal preferably soaked and fed as a warm slop with milk.

Middlings 300 pounds, oats 200, shorts 100, barley or corn 100, bran 50, is an excellent ration. Where middlings cannot be secured, the following mixture is good: oats 300, shorts 200, bran 50, corn or barley 100.

FROM FOUR TO FIVE MONTHS.—Shorts 200, oats 200, barley or corn 150, bran 50. Bran is a very necessary addition to the ration of the winter-fed pig. It lightens the mixture and is laxative. During this period, good use may frequently be made of boiled potatoes.

FROM FIVE MONTHS TO FINISH.—The pig that is active and thrifty will now be able to stand a period of heavier feeding. Shorts 100, oats 200, barley 200 (or barley 100, corn 100).

1. If possible feed skim-milk or buttermilk up to four or five months with all of the foregoing rations; after that, half water and half milk.
2. An addition of 3 pounds oil meal or tankage, or both, per hundred pounds of meal mixtures is recommended.
3. Without milk (it is almost essential to the winter-fed pig until 3 or 4 months) increase tankage to 6 or 7 per cent and feed 3 per cent oil meal.

4. An addition of one or two pounds of edible bone meal per hundred weight of meal mixture is good practice.

5. Where alfalfa meal is available it may take the place of bran and will help keep pigs active and healthy. Let winter pigs have access to some alfalfa or clover hay in any case.

BLACK TEETH.—There is a superstition that "black teeth" constitute a fatal condition in the sucking pig. The presence of long milk-teeth, black or otherwise, undoubtedly is fatal in most cases. The little pig bites the sow when suckling; she jumps up suddenly, and thus the litter is reduced frequently by trampled pigs. Examine mouths when two to three weeks of age, unless trouble is seen earlier. At this age the four upper teeth gradually become black and should be nipped off with a small pair of pliers. Removing these teeth at an earlier age, when the gums are tender, causes soreness and the pig does not suckle properly.

Summed up, the high lights of keeping a winter-fed pig on his feet, thrifty, growing, trim and lengthy are,—

1. Pigs from strong litters.
2. Dry, well-ventilated quarters and the use of sleeping-berths.
3. Exercise.
4. Light grain feeding of the young pigs, making special use of oats, middlings and shorts.
5. Roughages. (Alfalfa hay and roots).
6. Special care in feeding; no overfeeding or forcing.

COMPARATIVE COST FIGURES

Figures obtained from the Dominion Experimental Farms show that, where all items are considered, (service fee, yearly maintenance of sow, etc.) the cost of rearing a pig in an average litter of seven pigs raised to weaning is \$4.45 each, on the one-litter-a-year basis.

Where two litters are raised yearly, the cost per pig is reduced to \$2.82 at weaning. In other words, the extra, or fall litter, is obtained at an additional cost of \$8.34, or an additional cost per pig of \$1.19.

LIMITATIONS OF THE TWO-LITTER-A-YEAR POLICY

Finally, while it is possible to calculate certain profits from a herd of sows, based on their regular production of two litters a year, such does not work out in practice. While some sows will produce litters twice a year throughout their lives, the average per sow, in most herds of any size, more closely approaches three litters in two years. Further, in cases where it is desired to raise fall pigs and where spring litters must be delivered late, it will be found best to divide the herd into two groups, one producing pigs in the spring, the other in the fall. This will insure stronger but, of course, more costly litters.

SOME COMMON AILMENTS AFFECTING FALL LITTERS AND WINTER-FED PIGS

Without any attempt to enumerate swine diseases and ailments, the following description and treatments are listed dealing with conditions affecting swine, with particular reference to winter feeding. In practically all cases they are preventable and are caused by faulty methods of feeding, housing and management.

CONSTIPATION.—Particularly to be guarded against, with pregnant and milking sows; caused by too little exercise, lack of succulents and bulky material, and too much concentrated feed in the ration. Give 2 to 4 ounces raw linseed oil, once daily, in slop, for mature animals. If this has no effect, give as drench, 4 ounces Epsom salts. Use laxative feeds, bran, oil meal, flax seed, etc. Avoid drastic purgatives with the milking sow. Try to induce the desired condition through feeding cooling, laxative feeds.

DIARRHŒA (SCOURS).—Common and fatal with young pigs particularly. The causes are overfeeding the sow after farrowing, with corn or other rich feeds; sudden changes in feed; use of decomposed or sour slop; nervousness and irritability in the sow. Change the feed. Give 15 to 20 grains iron sulphate to the sow in slop, night and morning. Mix limewater with slop, or supply where the sow can reach it a mixture of iron sulphate, sulphur and salt (equal parts), with four times the quantity of ground charcoal. Limit the supply if the sow is greedy. For pigs give castor oil.

THUMPS.—Usually seen in young pigs. The symptoms are dullness; constipation or diarrhœa; short breathing with a peculiar thumping noise. The cause is disordered digestion due to too much concentrates in ration, or too much feed in combination with lack of exercise. The treatment is preventive largely. Provide exercise, forcing it where necessary, in cases of heavy-milking sows, by removing pigs to another pen for an hour or so daily. Restrict the feed of the sow. Apply these measures at first sign of overfatness or sluggishness and thumps will not appear. With weaned pigs, reduce concentrates, increase skim-milk and force exercise. In individual cases use castor or linseed oil. Difficult to treat.

INDIGESTION.—The symptoms are unthriftiness, poor feeding, arched back. It is caused by overfeeding; feeding decomposed slop or swill containing injurious substances. Remove all food for twelve hours; give 4 ounces of castor oil; feed lightly a slop of bran and shorts with green food or roots.

CRIPPLING.—This is often confounded with rheumatism. There is a stiffness and lameness generally of hind legs. Animal lies most of time until walking becomes impossible. Finally refuses to come to trough. Appetite disappears and death ensues. The causes are strong food and too much of it; lack of exercise; damp quarters due to poor ventilation; wet floors; filth. Usually a combination of all.

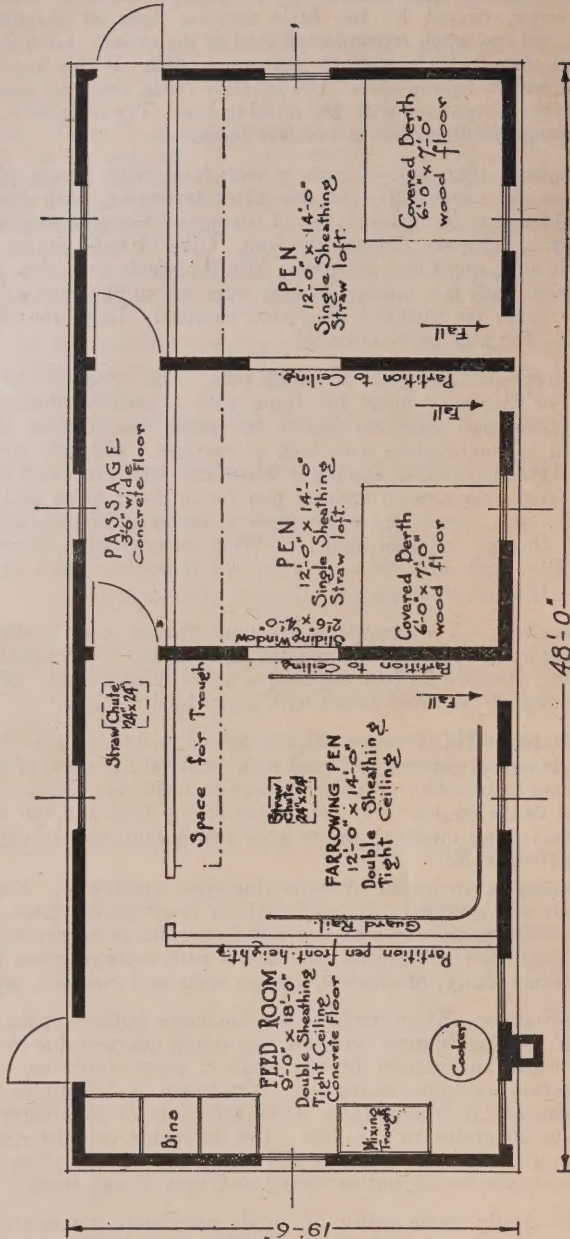
Crippling is prevented by supplying right conditions. Exercise outdoors; feed as already outlined. If the condition is advanced, force exercise; give 2 to 4 ounces Epsom salts in a pint of water, repeated in twenty-four hours. Feed, in small quantities, milk, bran, and shorts with roots or green feed. Give two tablespoonfuls, daily, of sulphur, Epsom salts and charcoal, equal parts.

RHEUMATISM.—The symptoms are lameness, stiffness, pain and swelling in joints. It is caused almost invariably by damp quarters due to wet floors, filth, or damp walls, and impure air, the result of poor ventilation. Heavy feeding, in conjunction, complicates matters. Treatment is difficult in advanced cases. (See treatment for "crippling".) Give salicylate of soda three times daily in feed, 20 to 30 grains to the dose. Use liniments or blistering ointments on affected joints. Give dry quarters and plenty of bedding. Prevent, by adopting outdoor methods for all but fattening and very young stock.

LICE.—Apply crude castor oil, crude petroleum, a mixture of raw linseed oil 2 parts, kerosene $\frac{1}{2}$ part, or fish oil 12 parts, creolin or coal oil 1 part or paraffin oil. The latter is excellent. Disinfect and clean quarters, if infested.

SHED PIGGERY SCALE
CONCRETE FLOORS THROUGHOUT

0 5 10 15 Feet.



Plan of shed-piggery. For exterior view see illustration on page 2.